

Appln. No. 10/788,621

Attorney Docket No. DKT03160

I. Amendments to the Specification

Please replace paragraphs [0024] and [0025] with the following amended paragraphs:

[0024] The drive shaft 110 is preferably supported by a pair of anti-friction bearings such as roller bearing assemblies 112. The drive shaft 110 includes a ball screw portion 114. Between the drive shaft 110 and the ball screw portion 114 are mounted a plurality of Belleville springs or washers 116 that function as a resilient stop. Disposed about the ball screw portion 114 is a recirculating ball nut 122. The recirculating ball nut 122 includes a plurality of balls or roller bearings 124 which recirculate about the complementarily configured grooves in the ball screw portion 114 and thus provide a low friction interconnection between the ball screw portion 114 and the recirculating ball nut 122. As the shaft 110 bi-directionally rotates in response to bi-directional rotation of the output shaft 84 of the electric motor 80, the recirculating ball nut 122 translates to the left and right as viewed in Figure 2. The ball screw portion 114 and the recirculating ball nut 122 thus function as a rotary to linear motion transducer.

[0025] The recirculating ball nut 122 is coupled to a master piston 130 which translates axially within an elongate cylinder 132 which also contains the [[lead]] ball screw portion 114. The master piston 130 includes a pair of O-ring seals 134 which are received within suitably configured circumferential grooves 136 near each end of the master piston 130. The master piston 130 is shown in Figure 2 in its fully advanced or extended position. As the master piston 130 is retracted by rotation of the ball screw portion 114, it passes a port 138 which communicates with a fluid reservoir 140. The fluid reservoir 140 is preferably maintained substantially full of a

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hydraulic fluid 142 such that the elongate cylinder 132 may be fully filled with hydraulic fluid when the master piston 130 is retracted. A flexible seal 144 accommodates changes in volume of the hydraulic fluid 142 and a metal plate or cap 146 secures the flexible seal 144 and maintains a fluid tight seal thereabout. The elongate cylinder [[130]] 132 narrows to a first fluid passageway 150 which provides for communication and flow of the hydraulic fluid 142 to the driven components of the electrohydraulic clutch assembly 70.

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